Remarks

The present application was filed on October 17, 2001. This Amendment is responsive to the Advisory Action mailed December 17, 2004 and the final Office Action mailed September 30, 2004 and accompanies a request for continued examination (RCE) filed for this case. The final Office Action made the restriction/election requirement final and finally rejected claims 1-9. In response, the Applicant has herein requested withdrawal of the final rejection and reconsideration and allowance of amended claims 1, 3, and 5-9 as well as new claims 21-33. These amendments are proper, do not introduce new matter, and place the application in proper condition for reconsideration and allowance of all pending claims.

Request for Withdrawal of Final Rejection

The Applicant wishes to thank the Examiner for granting the requested telephone interview conducted on November 8, 2004 to discuss the basis for the final rejection. No agreement was reached between Applicant's representative Mitchell McCarthy and Examiner Tugbang, and Examiner Tugbang has memorialized the interview in an Interview Summary dated 11/12/2004.

Following the interview and review of the Interview Summary, Applicant reiterates that the final rejection is premature. In response to the first rejection the Applicant successfully argued that Morehouse '572 cannot sustain a Section 102 rejection because it does not disclose laterally biasing the discs to prevent repeatable runnout, as originally claimed. Additionally, the Applicant opted to broaden the claims in view of the art of record at that time. Subsequently, the Examiner withdrew the rejection on Morehouse '572 and based the final rejection on new reference Kuroba '990.

The final rejection is premature because the Applicant is entitled to a Nonfinal Office Action setting forth a bona-fide rejection. The first rejection based on Morehouse '572 was erroneous, and was obviated by amendment; as such, the Applicant's broadening amendments cannot rightfully be viewed as having necessitated the Examiner making the second action final.

In the Interview Summary the Examiner posits two reasons justifying making final the most recent Office Action. First, the Examiner urges that the placing step of claim 1 was narrowed by changing the phrase "prewritten disc" to "disc comprising servo pattern information written..." because the disc no longer had to be prewritten. The Applicant traverses this assertion because the amendment, by not requiring the disc be prewritten, is broadening of the claim scope and not narrowing. Second, the Examiner urges claim 1 was narrowed by changing the phrase "disc alignment mark" to "angular reference axis." Again, the Applicant traverses this assertion because the amendment is broadening of the claim scope and not narrowing. The broader claim language reads on the embodiments described as well where the angular reference is tracked without any alignment marks.

However, in satisfaction of the requirements of 37 CFR 1.116(b), the amendments herein were not provided earlier because the reference upon which the final rejection was made was not previously in the record.

Withdrawal of the final rejection is respectfully requested so that the amendments herein can be fully considered and the claims allowed to pass to issuance.

Restriction/Election Requirement

The restriction/election requirement was made final on the asserted basis that the product of Group II claims can be made by a materially different process than claimed in the Group I claims. In particular, the Examiner asserted that the Group II product claims could be made by writing the servo pattern information on the disc after the disc is biased against the motor hub.

The previous broadening amendments contemplated a method and apparatus involving a single disc. The claims as herein amended contemplate a disc stack comprising two or more discs. New claims 25 and 30, like method claim 1, recite common novelty in both the apparatus and the associated method in that all the discs have prewritten servo information written in relation to a common angular reference; that is, all the prewritten discs are substantially identical in relation to the orientation of the offset servo tracks.

Contrarily, Kuroba '990 discloses a solution requiring the discs in a stack be written individually according to the differently biased groups of discs; that is, the differently biased groups of prewritten discs are configured differently in relation to the orientation of the servo tracks:

> If a plurality of disk media 20 are stacked, a balance control can be attained by the following manner. The position at which the inner periphery of the disk medium comes into contact with the outer periphery of the spindle hub is changed alternately one by one at positions symmetrically with respect to the axis E of rotation...However, in a case of the data surface servo system, the servo track writing (STW) must be performed individually for the groups of disks in which the contact position is changed for the respective groups. (Kuroba '990, col. 8 lines 31-41, emphasis added)

Accordingly, the Applicant has herein filed new product claims to replace the withdrawn claims 10-20 that are subject to the finality of the restriction/election requirement. Reconsideration and passage to allowance of new claims 25-33 are respectfully requested.

Objection to Claims

Claims 2 and 7-9 were objected to for lack of antecedent basis for the "obtaining a disc step" language. Claim 2 has been cancelled, and claims 7-9 have been amended to delete the objectionable language in order to obviate the objection. Withdrawal of the present objection is respectfully requested.

Rejection Under 35 USC 112 First Paragraph

Claim 9 was rejected for lack of a supporting written description. Particularly, it was asserted in the rejection that there is no support from the specification for the second indicia being located on the other side of the disc in relation to the first indicia: "Nowhere is it shown or discussed that the marks 134 are on different sides or different surfaces of the disc." (Office Action pg. 4) This rejection is respectfully traversed as being a misplaced reading of the present specification.

The Applicant points to at least the following portion of the written description which clearly supports the claimed subject matter:

> When the servo information is prewritten to the disc 108, three radial lines 133 are made on both an upper surface 136 and a lower surface (not shown) of the disc 108. A middle line of the three radial lines is an alignment mark 134. The three radial lines 133 can be made by a laser, which is typically used to form the texturized landing zones on the disc surfaces. The three radial lines 133 are written near an inner diameter of the disc 108. Locating the radial lines 133 on the upper surface

> 136 and the lower surface of the disc, as opposed to an edge of the disc, allows the radial lines 133 to be located quickly with an automated optical detector. The angular spacing between the three radial lines 133 is not uniform, but the radial lines 133 form a pattern that is similar on the upper surface 136 and the lower surface of the disc 108. However, the pattern on the lower surface is a reflection about the middle radial line when compared to the pattern on the upper surface 138. As a result, the pattern may be used to identify the upper surface 138 and the lower surface.
> (specification paragraph [0023], emphasis added)

The written description evidences that the Applicant had possession of the claimed subject matter at the time of filing the present application. Namely, the written description contemplates the alignment marks 134 being defined on opposing upper and lower surfaces, and in some embodiments being respective mirror images as shown in FIGS. 1 and 2. Reconsideration and withdrawal of the present rejection are respectfully requested.

Rejection Under 35 USC 112 Second Paragraph

Claim 9 was rejected for indefiniteness. Particularly, it was asserted in the rejection that it is unclear from the specification what is meant by the phrase "other side": "In claim 9, it is unclear from the disclosure what is meant by the recitation of "on the other side of the disc" (lines 3-4) as this refers to the relationship of the first and second indicia." (Office Action pg. 5) This rejection is respectfully traversed as being a misplaced reading of the present specification.

The Applicant points again to the passage above which enables a skilled artisan to clearly understand that the first and second indicia can be disposed on upper and lower surfaces of the disc, as opposed to an edge of the disc. Accordingly, the "other side" of the disc comprising the second alignment mark refers to the upper or lower surface, respectively,

in relation to whether the first alignment mark is disposed on the lower or upper surface. Reconsideration and withdrawal of the present rejection are respectfully requested.

Rejection Under 35 USC 102(e)

Claims 1-5, 7 and 9 were rejected as being anticipated by U.S. Patent No. 6,081,990 issued to Kuroba ("Kuroba '990"). This rejection is respectfully traversed.

Claim 1

Kuroba '990 cannot sustain the Section 102 rejection because it does not disclose all the features of claim 1, which recites at least the following:

> *placing a plurality of discs, each characterized by servo tracks that are offset in relation to a common angular reference....*
> (excerpt of claim 1)

The embodiments of the present invention as claimed in claim 1 cover a method for placing and biasing two or more discs with prewritten servo information into a disc stack. The prewritten discs have offset servo information written in relation to a common angular reference axis; that is, in accordance with embodiments of the present invention two or more substantially identical prewritten discs, in relation to servo information offset orientation, are placed and biased to form the disc stack.

The Applicant has included herewith Exhibit A which is a color diagram illustrating more explicitly how two identically prewritten discs, with respect to servo information offset orientation, are placed and biased according to the embodiments of claim 1. The purpose for the explanatory Exhibits A and B is to merely distinguish over the disclosure of Kuroba '990.

The Exhibits are not necessary for a skilled artisan to understand the scope of the present invention as claimed in view of the written description. It will be noted that the size of the inner diameter (I.D.) in comparison to the size of the hub is exaggerated for clarity sake.

Disc 1 (in red) and disc 2 (in blue) are initially written with servo tracks in reference to a common angular reference, such as a zero degree timing mark associated with both discs. In the servo writing position of the discs, where the angular references are colinear, all the disc features of outer diameter (I.D.), inner diameter (I.D.), and respective servo tracks are concentrically disposed. To balance the discs in a data storage device, the prewritten discs are then placed 180 degrees out of phase and biased against the hub in directions along the respective angular references (in this case opposite directions). While the disc diameter features lose concentricity, the servo tracks achieve concentricity.

The embodiments illustrated by Exhibit A illustrate a two-disc stack where the discs are placed 180 degrees out of phase and biased. Exhibit B similarly illustrates a diagram illustrating how the identical discs can likewise be placed 120 degrees out of phase for providing a three-disc stack.

Kuroba '990 explicitly discloses only using discs which are prewritten with respect to different reference axes in forming a disc stack: "However, in a case of the data surface servo system, the servo track writing (STW) must be performed individually for the groups of disks in which the contact position is changed for the respective groups." (Kuroba '990, col. 8 lines 38-41, emphasis added). Kuroba '990 is silent regarding writing servo information to the discs in relation to a common angular reference, placing the discs with the respective angular axes symmetrically disposed around the motor hub, and biasing the discs in a direction of the respective angular reference. Accordingly, Kuroba '990 cannot sustain the Section 102

rejection because the cited reference does not disclose all the features recited by claim 1. Reconsideration and withdrawal of the present rejection of claim 1 and the claims depending therefrom are respectfully requested.

Rejection Under 35 USC 103

Claims 6 and 8 were rejected as unpatentable over Kuroda [sic] '990 and further in view of JP 5-205442. These claims are allowable as dependent claims of an allowable independent claim, for reasons above, that provide additional limitations thereto. Reconsideration and withdrawal of the present rejection are respectfully requested.

New Claims

New claims 21-24 are allowable as dependent claims of an allowable independent claim 1 providing additional limitations thereto. Support for the claimed subject matter is found at least in paragraph [0023] of the specification and in FIGS. 1 and 2.

New claim 25 is allowable over the art of record which is silent regarding *A disc stack comprising first and second discs that are each prewritten before stacking them with servo tracks that are offset with respect to a disc center and in relation to an angular reference axis... wherein rotating the discs to misalign the angular reference axes and biasing each disc against the hub in a direction of the respective angular reference axis places the first disc nonconcentrically disposed to the second disc and the servo tracks of the first disc concentrically disposed to the servo tracks of the second disc.* New claims 26-29 are allowable as dependent claims of claim 25 providing additional limitations thereto.

New claim 30 is allowable over the art of record as a steps-for claim in accordance with Section 112 paragraph 6. The Applicant has identified the function associated with the recited "means" element as being the placing and biasing of substantially identically prewritten discs, with respect to servo information orientation, in forming a desired disc stack. Accordingly, the disclosed structure performing this function in some embodiments includes the disc 108 and programmed instructions for performing methods in accordance with the embodiments of the present invention, which in some embodiments comprises the process steps illustrated in FIG. 3.

The Examiner is obliged as a matter of law to construe this means element as this structure, and equivalents thereof, that are capable of the identical function. See *B. Braun Medical, Inc. v. Abbott Lab.*, 43 USPQ2d 1896, 1900 (Fed. Cir. 1997); In *re Donaldson Co. Inc.*, 26 USPQ2d 1845 (Fed. Cir. 1994)(*en banc*); *In re Dossel,* 42 USPQ2d 1881 (Fed. Cir. 1997); *Supplemental Examination Guidelines for Determining the Applicability of 35 U.S.C. 112, Para. 6,* 65 FR 38510. Failure to do so constitutes reversible error.

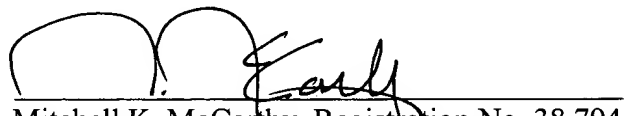
When this means element is properly construed, it is clear that none of the references in the record, each taken as a whole and taken individually or collectively, disclose or suggest this element. New claims 31-33 are allowable as dependent claims of claim 30 providing additional limitations thereto.

Conclusion

This along with the accompanying RCE is intended to be a complete response to the Advisory Action mailed December 17, 2004 and the final Office Action mailed September 30, 2004. The Applicant respectfully requests that the Examiner enter the above

amendments, reconsider the application and allow all of the pending claims. The Examiner is invited to contact the below signed Attorney should any questions arise concerning this response.

Respectfully submitted,

By: 

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